



PATENT/DESIGN PATENT

## DECLARATION

As a below-named inventor, I hereby declare that:

My residence, post office address, and citizenship are as stated below next to my name.

I verily believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

HEAT DRIVEN ACOUSTIC ORIFICE TYPE PULSE TUBE CRYOCOOLER

(Insert invention title)

the specification of which is attached hereto or, if not attached, was filed as International Application No. PCT/\_\_\_\_/\_\_\_\_, on \_\_\_\_\_, 19\_\_\_\_, designating the United States. (Insert PCT ser. no. and filing date if applicable)

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to in the declaration.

I acknowledge the duty to disclose all information which is known to be material to patentability of this application in accordance with Title 37, Code of Federal Regulations §1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, §119, of the foreign application(s) for patent or inventor's certificate designated below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

(List prior foreign applications)

| COUNTRY | APPLICATION NUMBER | DATE OF FILING<br>(day, month, year) | PRIORITY CLAIMED<br>UNDER 37 USC 119                                |
|---------|--------------------|--------------------------------------|---|
| KR      | 10-2002-0048381    | 16 August 2002                       | <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO |
|         |                    |                                      | <input type="checkbox"/> YES <input type="checkbox"/> NO            |
|         |                    |                                      | <input type="checkbox"/> YES <input type="checkbox"/> NO            |

I hereby declare that all statements made herein of my knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Telephone calls and correspondence should be directed to:


**VIDAS, ARRETT & STEINKRAUS**

Suite 2000, 6109 Blue Circle Drive, Minnetonka, Minnesota 55343, USA

Phone (612) 563-3000 Facsimile (612) 563-3001

**Sole or First Inventor**

Full Name: KIM, Ig Saeng

Inventor's  
Signature: 

Date: August 14, 2003


Citizenship: Republic of Korea

Post Office  
Address: 113-404, Hyundai Apt.  
Baekseok-dong, Cheonan-si  
330-220 Chungcheongnam-do  
Republic of Korea

Residence:  
(if different  
from post  
office address)

**Second Inventor**

Full Name: KIM, Chun Dong

Inventor's  
Signature: 

Date: August 14, 2003

Citizenship: Republic of Korea

Post Office  
Address: 353-305, Toegye Apt.  
Geumjeong-dong, Gunpo-si  
435-050 Gyeonggi-do  
Republic of Korea

Residence:  
(if different  
from post  
office address)

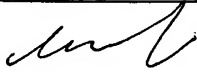
(Attach additional sheets for third and subsequent inventors)

Attorney Docket No. 540.2-11278-4501

APP.# : 10/643,239

**Inventor**

Full Name: LEE, Chang Ho

Inventor's Signature: 

Date: August 14, 2003


Citizenship: Republic of Korea

Post Office Address: 345-1305, Yulgok Apt.  
876, Geumjeong-dong, Gunpo-si

Residence: 435-050 Gyeonggi-do  
(if different Republic of Korea  
from post office address)

**Inventor**

Full Name: KIM, Kyun Seok

Inventor's Signature: 

Date: August 14, 2003


Citizenship: Republic of Korea

Post Office Address: 308-1302, Pungnim Apt.  
Gwonseon-dong, Gwonseon-gu

Residence: Suwon-si, 441-390 Gyeonggi-do  
(if different Republic of Korea  
from post office address)

**Inventor**

Full Name: KIM, Do Hyung

Inventor's Signature: 

Date: August 14, 2003

Citizenship: Republic of Korea

Post Office Address: 608-1102, Saetbyeol Apt.  
Bisan-dong, Dongan-gu

Residence: Anyang-si, 431-050 Gyeonggi-do  
(if different Republic of Korea  
from post office address)

**Inventor**

Full Name: \_\_\_\_\_

Inventor's Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Citizenship: \_\_\_\_\_

Post Office Address: \_\_\_\_\_

Residence: \_\_\_\_\_  
(if different  
from post office address)

**Inventor**

Full Name: \_\_\_\_\_

Inventor's Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Citizenship: \_\_\_\_\_

Post Office Address: \_\_\_\_\_

Residence: \_\_\_\_\_  
(if different  
from post office address)

**Inventor**

Full Name: \_\_\_\_\_

Inventor's Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Citizenship: \_\_\_\_\_

Post Office Address: \_\_\_\_\_

Residence: \_\_\_\_\_  
(if different  
from post office address)

*Declaration - additional inventor sheet*

*APP # 10/643,239*



PATENT/DESIGN PATENT  
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor: KIM, Ig Saeng; KIM, Chun Dong; LEE, Chang Ho;  
KIM, Kyun Seok; and KIM, Do Hyung  
Title: HEAT DRIVEN ACOUSTIC ORIFICE TYPE PULSE  
TUBE CRYOCOOLER

POWER OF  
ATTORNEY  
(ASSIGNEE FORM)

Filing Date: August 18, 2003  
Serial No.: 10/643,239  
Docket No.: S40.2-11278-US01

(Filing date, serial number and docket number may be left blank at time of signing)

The below named Assignee of the entire interest of the above identified patent application, filed concurrently herewith or for which the docket no., filing date and application number may be inserted above by any attorney of Vidas Arrett & Steinkraus, P.A., when known, hereby appoints the following attorneys to prosecute this application and any application claiming priority therefrom; to execute any terminal disclaimers; and to transact all business in the Patent and Trademark Office connected therewith and with any patent issuing therefrom:

|                         |                 |
|-------------------------|-----------------|
| Oliver F. Arrett        | Reg. No. 22,117 |
| Scott Q. Vidas          | Reg. No. 30,812 |
| Walter J. Steinkraus    | Reg. No. 29,592 |
| Richard A. Arrett       | Reg. No. 33,153 |
| Leoniede M. Brennan     | Reg. No. 35,832 |
| Jane H. Arrett          | Reg. No. 33,355 |
| William E. Anderson, II | Reg. No. 37,766 |
| Robert O. Vidas         | Reg. No. 20,164 |

all of VIDAS, ARRETT & STEINKRAUS, Professional Association, Suite 2000, 6109 Blue Circle Drive, Minnetonka, Minnesota 55343, USA, Telephone (612) 563-3000; and I hereby authorize them to act and rely on instructions from, and to communicate directly with, the firm or person which sent this case to VIDAS, ARRETT & STEINKRAUS unless or until I instruct VIDAS, ARRETT & STEINKRAUS in writing to the contrary. I have authority to execute this document on behalf of the Assignee.

Date August 14, 2003 (Name of Assignee)

LG CABLE LTD.

(Signature)

(Title)

By:

D. K. Han  
HAN, Dong-Kyu

Its: President

VIDAS, ARRETT & STEINKRAUS  
Suite 2000, 6109 Blue Circle Drive, Minnetonka, Minnesota 55343, USA  
Phone (612) 563-3000 Facsimile (612) 563-3001